

L Number	Hits	Search Text	DB	Time stamp
1	257192	ag or silver	USPAT; US-PGPUB	2003/07/28 16:29
2	269501	diffus\$3	USPAT; US-PGPUB	2003/07/28 16:29
3	516896	oxide	USPAT; US-PGPUB	2003/07/28 16:29
4	351	(ag or silver) with diffus\$3 with oxide	USPAT; US-PGPUB	2003/07/28 16:29
5	1510425	contact or electrode	USPAT; US-PGPUB	2003/07/28 16:29
6	299	((ag or silver) with diffus\$3 with oxide) and (contact or electrode)	USPAT; US-PGPUB	2003/07/28 16:30
7	73	((ag or silver) with diffus\$3 with oxide) with (contact or electrode)	USPAT; US-PGPUB	2003/07/28 16:34
8	2082	(ag or silver) adj2 diffus\$3	USPAT; US-PGPUB	2003/07/28 16:35
9	54	oxide with ((ag or silver) adj2 diffus\$3)	USPAT; US-PGPUB	2003/07/28 17:12
10	67	((((ag or silver) with diffus\$3 with oxide) with (contact or electrode)) not (oxide with ((ag or silver) adj2 diffus\$3))	USPAT; US-PGPUB	2003/07/28 17:12

US-PAT-NO: 4830876

DOCUMENT-IDENTIFIER: US 4830876 A

TITLE: Process for producing contact strips on substrates,  
especially on glazing

----- KWIC -----

Detailed Description Text - DETX (6):

By virtue of the heat treatment, the metal of contact strip 2 has penetrated atomically by diffusion into the electrically conductive surface coating 8, which is indicated by the hatched area between the contact strip 2 and the surface coating 8. By this diffusion process, the original dielectric or oxide has been doped with the noble metal of the suspension--silver in the present case--so that a current can flow between the electrically conductive surface coating 8 and the contact strip 2 (and similarly, of course, the contact strip 3). The contact strips in turn can be connected to the terminal wires 4 and 5, by a soldering process, for example.

5011745

SAME  
DISCLOSURE



US-PAT-NO: 6124769

DOCUMENT-IDENTIFIER: US 6124769 A

\*\*See image for Certificate of Correction\*\*

TITLE: Electronic device, and its fabrication method

----- KWIC -----

Detailed Description Text - DETX (223):

Then, the Ag-containing paste for the second metal layer was coated by a dipping process on both ends of the chip member on which the precursor to the first metal layer was formed, dried, heated at a heating rate of 1,800.degree. C./h (sample 1), 2,400.degree. C./h (sample 2), and 3,000.degree. C/h (sample 3), and held at 650.degree. C. for 10 minutes in the air, thereby completing the second metal layer and, at the same time, oxidizing the surface of the precursor to the first metal layer to form an intermediate oxide layer containing copper oxide having a relatively high resistance. In this case, the silver particles contained in the second metal layer were dispersed in the intermediate oxide layer to form a path. The effective resistance value depended on the path formed by the Ag particles diffused into the intermediate oxide layer, and became low.



DOCUMENT-IDENTIFIER: US 20020033484 A1

TITLE: Wiring line assembly for thin film transistor array substrate and a method for fabricating the same

----- KWIC -----

Detail Description Paragraph - DETX (23):

[0078] As described above, an oxide layer of the alloy element is formed at the surface and the interface between the Ag alloy-based layer and the silicon oxide layer. The oxide layer enhances the adhesion between the Ag alloy-based

layer and the neighboring layers or the substrate. Particularly, when the underlying layer is based on silicon, such an oxide layer lowers contact resistance between the Ag alloy-based layer and the silicon-based layer, and prevents diffusion of the Ag content of the Ag alloy-based layer to the silicon-based layer. That is, the Ag alloy-based layer can contact the silicon-based layer in a stable manner.

Detail Description Paragraph - DETX (57):

[0109] In this structure, the metallic oxide layer 510 is disposed between the Ag alloy-based layer for the data line assembly and the silicon-based layer for the ohmic contact patterns 55 and 56. The metallic oxide layer 510 lowers the contact resistance between the two neighboring layers while enhancing the

adhesion thereof, and prevents diffusion of the Ag content of the Ag alloy-based layer to the silicon-based layer.



US-PAT-NO: 6486514

DOCUMENT-IDENTIFIER: US 6486514 B2

TITLE: Wiring line assembly for thin film transistor array substrate and a method for fabricating the same

----- KWIC -----

Detailed Description Text - DETX (22):

As described above, an oxide layer of the alloy element is formed at the surface and the interface between the Ag alloy-based layer and the silicon oxide layer. The oxide layer enhances the adhesion between the Ag alloy-based layer and the neighboring layers or the substrate. Particularly, when the underlying layer is based on silicon, such an oxide layer lowers contact resistance between the Ag alloy-based layer and the silicon-based layer, and prevents diffusion of the Ag content of the Ag alloy-based layer to the silicon-based layer. That is, the Ag alloy-based layer can contact the silicon-based layer in a stable manner.

Detailed Description Text - DETX (53):

In this structure, the metallic oxide layer 510 is disposed between the Ag alloy-based layer for the data line assembly and the silicon-based layer for the ohmic contact patterns 55 and 56. The metallic oxide layer 510 lowers the contact resistance between the two neighboring layers while enhancing the adhesion thereof, and prevents diffusion of the Ag content of the Ag alloy-based layer to the silicon-based layer.